

Patent claims

1. A set of integrated capacitor arrangements (10),
5 having at least two integrated capacitor arrangements (10), which have been produced in accordance with identical geometrical designs and which each contain a circuitry-effective main capacitor (12) and at least one correction capacitor (16),
10 having an electrically conductive connection between the correction capacitor and the main capacitor in one capacitor arrangement, the connection having been produced after the production of the main capacitor of
15 this capacitor arrangement,

and having an electrically insulating interruption (62) between the same correction capacitor (16) and the main capacitor (12) in the other capacitor arrangement (10),
20 the interruption having been produced in accordance with the geometrical designs.
2. The capacitor arrangements (10) as claimed in claim 1, **wherein** the connection and the interruption
25 are situated at identical positions in the capacitor arrangements (10).
3. The capacitor arrangements (10) as claimed in claim 1 or 2, **wherein** the connection has been produced
30 by local heating,

and/or **wherein** the connection contains a material warpage which penetrates through a dielectric and arose on account of the heating.
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4. The capacitor arrangements (10) as claimed in one of the preceding claims, **wherein** a material covering

the connection contains a cutout leading to the connection,

wherein a material covering the interruption (62)
5 contains a cutout (58) leading to the interruption,

and/or **wherein** the cutouts are filled with a passivating material.

10 5. The capacitor arrangements (10) as claimed in one of the preceding claims, **characterized** by in each case at least one further correction capacitor (14),

by a further electrically conductive connection (42)
15 between the further correction capacitor and the main capacitor (12) in one capacitor arrangement (10), the connection having been produced in accordance with the geometrical designs,

20 and with a further electrically insulating interruption between the same further correction capacitor and the main capacitor in the other capacitor arrangement, the interruption having been produced after the production of the main capacitor of the other capacitor
25 arrangement.

6. The capacitor arrangements (10) as claimed in claim 5, **wherein** the further interruption arose as a result of local heating and vaporization of an
30 electrically conducting section.

7. The capacitor arrangements (110) as claimed in one of the preceding claims, **wherein** dielectrics of the capacitors (112 to 116) have a thickness which is equal
35 to the thickness of a dielectric between metallization layers in which connection sections of connections to integrated semiconductor components are situated.

8. The capacitor arrangements (110) as claimed in one of the preceding claims, **wherein** the capacitors (112 to 116) have electrodes situated in more than two metallization layers,

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and/or **wherein** the electrodes are formed in a whole-area or grid-like manner.

9. The capacitor arrangements (10) as claimed in one of the preceding claims, **wherein** dielectrics of the capacitors (12 to 16) have a thickness which is less than the thickness of the dielectric between metallization layers in which connection sections of connections to integrated semiconductor components are situated, preferably less at least by half.

10. The capacitor arrangements (10, 110) as claimed in one of the preceding claims, **wherein** the capacitance of a correction capacitor (14, 16; 114, 116) amounts to less than $1/3$, less than $1/10$, less than $1/100$ or less than $1/1000$ of the capacitance of the main capacitor (12, 112).

11. A set of integrated grid capacitors (110),
having at least two integrated grid capacitors, which are produced in accordance with identical geometrical designs and each contain a plurality of transverse electrodes forming a circuitry-effective main part of the grid capacitor,

characterized by at least two (220) correction transverse electrodes arranged at identical positions in the grid capacitors (110) which electrodes have circuitry-effective lengths of different magnitudes,

the circuitry-effective length of a correction transverse electrode (200), after the production of the

main part, having been shortened by an electrically insulating interruption (206) and/or by vaporization of part of the correction transverse electrode or having been lengthened by production of an electrically
5 conductive connection.

12. The grid capacitors (110) as claimed in claim 11, **wherein**, in a material covering the correction transverse electrode, there is arranged at least one
10 cutout (206, 208; 222) leading to the correction transverse electrode and/or to a region at which the correction transverse electrode was arranged prior to the vaporization,

15 and/or **wherein** the cutout (206, 208; 222) is filled with a passivating material.

13. The grid capacitors (110) as claimed in claim 12, **wherein** a plurality of cutouts (206, 208) lead to a
20 correction transverse electrode (200),

or **wherein** one cutout which essentially covers the entire region of the original correction transverse electrode leads to a correction transverse electrode
25 (220).

14. The grid capacitors (110) as claimed in one of claims 11 to 13, **characterized** by features of at least one capacitor arrangement as claimed in one of claims 1
30 to 10.